

WHAT IS CLAIMED IS:

1. A color filter substrate for a liquid crystal display, comprising:
a transparent substrate;
a color filter formed on the transparent substrate with a groove;
a first transparent conductive layer covering the color filter;
a black matrix formed on the first transparent conductive layer within the groove
of the color filter.
2. The color filter substrate of claim 1, further comprising an organic film
formed on the black matrix while filling the groove of each color filter.
3. The color filter substrate of claim 2, wherein the black matrix has a
double-layered structure of a chrome layer and a chrome oxide layer.
4. The color filter substrate of claim 1, further comprising a photosensitive
film formed on the black matrix while filling the groove of each color filter.
5. The color filter substrate of claim 4, wherein the black matrix has a
double-layered structure of a chrome layer and a chrome oxide layer.
6. The color filter substrate of claim 1, wherein the black matrix is formed
of an organic material such that the black matrix fills the groove of the color filter.
7. The color filter substrate of claim 6, further comprising a second
transparent conductive layer covering the photosensitive film.
8. The color filter substrate of claim 1, wherein the black matrix comprises
a first portion formed at the area between the neighboring color filters, and a second
portion formed at the area within each color filter and partitioning the color filter into a
plurality of domains.

9. A color filter substrate for a liquid crystal display, comprising:

a transparent substrate;

a color filter formed on the transparent substrate with a groove;

a black matrix formed within the groove of the color filter; and

a transparent conductive layer formed on the black matrix.

10. The color filter substrate of claim 9, further comprising an organic film formed on the black matrix such that the organic film is covered by the transparent conductive layer while filling the groove of each color filter.

11. A method of fabricating a color filter substrate for a liquid crystal display, comprising the steps of:

forming color filters on a transparent substrate such that each color filter has a groove;

forming a first transparent conductive layer on the color filters;

depositing a black matrix layer onto the first transparent conductive layer;

forming a gap filler on the black matrix layer to fill the groove of each color filter;

and

removing the exposed portion of the black matrix layer through etching.

12. The method of claim 11, wherein the gap filler is formed through coating an organic film onto the black matrix layer, and ashing the organic film.

13. The method of claim 11, wherein the gap filler is formed through coating a photosensitive film onto the black matrix layer, exposing the photosensitive film to light, and developing the light-exposed film.

14. The method of claim 11, wherein the black matrix layer is formed

through sequentially depositing a chrome layer and a chrome oxide layer onto the first transparent conductive layer.

15. The method of claim 11, further comprising the step of forming a second transparent conductive layer to cover the gap filler.

5 16. A method of fabricating a color filter substrate for a liquid crystal display, comprising the steps of:

forming color filters on a transparent substrate such that each color filter has a groove;

forming a first transparent conductive layer on the color filters; and

forming a black matrix on the first transparent conductive layer to fill the groove of each color filter.

17. The method of claim 16, further comprising the step of forming a second transparent conductive layer on the black matrix.

18. A method of fabricating a color filter substrate for a liquid crystal display, comprising the steps of:

forming color filters on a transparent substrate such that each color filter has a groove;

depositing a black matrix layer onto the color filters;

forming a gap filler on the black matrix layer to fill the groove of each color filter;

20 removing the exposed portion of the black matrix layer through etching; and

forming a transparent conductive layer on the gap filler.